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Original Communications.

WRITERS' CRAMP, OR SCRIVENERS' PALSY.

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WRITERS' cramp, or scriveners' palsy, as it has been differently designated, is a disease which incapacitates those suffering from it, for the performance of the special and complex movements which are necessary for the act of writing, without implicating the muscular strength, or impairing the ability to execute any other movement whatever. The pain and spasmodic contraction which ensues upon any attempt being made to write, does not occur when the affected part is called upon to perform any other action, however complex. It is not peculiar to writers alone, but occasionally manifests itself by affecting the ability to perform coördinated and special movements in those habituated to other employments. Thus, the performer on the piano may find himself unable to strike the proper keys on that instrument, while his muscular strength in other respects may be intact. Hammond relates the case of an engraver who could perform every other movement, but could not guide his burin.* Reynolds saw a mason in whom this disease prevented the use of a trowel in his trade.† Some years since I had a patient who could perform every duty required in a printing office, but set type; when that was attempted he would be seized with spasm in the muscles of his right hand and forearm, though prior to the advent of the disease he had been a very skilful compositor. The peculiar character of the disease is manifested in its disposition to implicate those movements which have been acquired by education.

1. A gentleman twenty-nine years of age, connected with the city government of New York, consulted me in January, 1871, for an affection of the right arm and hand, which had developed itself several months previously, and had advanced so rapidly that it was with great difficulty he could then sign his name. Upon attempting to write, the fingers closed spasmodically, and the point of the pen was driven into the paper. If he was pre-occupied, or was not paying special attention to what he was doing, he could succeed much better, but in any event, spasm would ensue sooner or later. The first

* Hammond, Diseases of the Nervous System, page 713.
† Reynolds, System of Medicine, article "Writers' Cramp," vol. 2, page 286.

symptom he noticed was a dull, heavy, but not painful sensation, in the ball of the thumb. His handwriting changed markedly, became irregular and occasionally illegible. Spasmodic contractions soon followed, and he was compelled to abandon all attempts at writing. When he endeavored to write his name in my office, the fingers closed, the hand was flexed upon the wrist, and the attempt had to be abandoned. Yet a few moments subsequently he found no difficulty in taking the same pen and paper and making a number of sketches. The æsthesiometer showed that tactile sensibility was unimpaired, and his muscular strength was very great. He was a skilful performer on different musical instruments before this affection manifested itself, and he was quite fearful lest his musical acquirements should suffer in the same manner as his power of writing; yet, no such result ensued. This gentleman was enjoined to abstain from writing for several months, and the sixtieth of a grain of atropia was injected hypodermically, three times a week. At the expiration of two months, circumstances compelled him to resume business, and since that time he has had no return of the disease. He received in all, about twenty injections.

2. A patient who had suffered from right hemiplegia, ultimately recovered to such an extent as to resume his former employment as a clerk. For two years he succeeded in performing his duties satisfactorily, when he discovered that after his day's work was done, his right hand was painful and tremulous. Soon afterwards, all the typical symptoms of writers' cramp were developed, and he was compelled to resign his position. This gentleman was forty-seven years of age, when paralyzed. From the history of the case the cerebral lesion was undoubtedly hæmorrhagic, though the amount of damage inflicted was trivial. There was complete recovery so far as the movements and sensibility of the arm were concerned, but slight dragging of the foot could be observed in walking. There were no secondary muscular contractions, and no apparent mental impairment. For the relief of the spasms, electricity had been employed, but without benefit. I administered three injections of atropia (the sixtieth of a grain at a time), but the patient passed from under my observation and I knew nothing of the subsequent history of the case.

3. Another gentleman, who had been engaged in clerical work, came under my care in the spring of 1872. He stated that in 1865 he began to suffer from spasms in the muscles of the hand and forearm whenever the act of writing was first commenced, but that by persistent effort he was able to continue at his business for several months. Finally, no amount of determination could overcome them, and he left the city temporarily and visited his parents in the western part of the state. He there learned that an elder brother living in Saint Louis, Mo., was affected in the same manner, and, failing to obtain relief, had been compelled to abandon all attempts to write.

In the autumn he returned to the city and resumed his former employment, the disease not manifesting itself again until about a year before I saw him. As before, the spasmodic contractions were slight at first, and for some time could be controlled by an effort of the will, and generally came on early in the morning when writing was first begun. Ultimately they extended to the arm and shoulder, and the attempt to write was followed by painful spasm in the hand and forearm, the fingers were flexed upon the hand, the hand upon the wrist, and the forearm upon the arm, while the elbow was forcibly drawn against the side. Mechanical devices, such as bandaging the wrist and strapping splints to the arm, were resorted to, but were without efficacy. Various kinds of pens were employed, but the result was always the same. Writing was abandoned for five months; but almost immediately it was resumed, the spasms returned as violently as ever. He now observes that a spasm of the right arm was followed by tremor in the muscles of the left arm, and general bodily exhaustion. No attempt at writing had been made for several months before he came under my care. At that time, there was no defect in sensation in the arm or hand, the muscular power was unimpaired, and voluntary acts of all descriptions, with the one exception, could be performed as readily as ever. He could take a pen and trace all the letters of the alphabet, and by forming the letters in Roman capitals, could print sentences without inconvenience, yet the slightest attempt at writing in the ordinary manner brought on the convulsive seizures just described. The treatment adopted in this case was the hypodermic injection of the sixtieth of a grain of atropia, three times a week. At the end of the first month, an equal quantity of strychnia was added to each dose, the formula employed being as follows:

℞ Atropiæ sulphat.,
Strychniæ sulphat., āā gr. i.;
Acidi sulph. dil., q. s.;
Aquæ ad. ʒ i.;
M. Dose, eight minims.

Three months elapsed before any change for the better occurred. He then found that the attempt to write did not excite the spasms as formerly, though they still came on when the act was continued for any length of time. Treatment was continued about six months, when he again resumed business, not completely cured, but in such condition that he could write several hours daily without inconvenience.

4. In another case that I saw casually, the patient had, for many years, been in the habit of writing from six to ten hours daily, and the first indications of the disease came on when working more than usual. It was essential that certain books should be copied in a certain time, and the labor devolving on him, he was compelled to

write until very late, for a number of weeks together. Before the task was completed, he began to suffer from spasm of the hand, and this so impaired the appearance and legibility of his writing, that he was compelled to abandon it. He then discovered that the execution of the muscular movements involved in writing was almost impossible, the attempt, even, resulting in painful and irregular spasmodic contractions. There was no swelling of the hand, and he could execute any other movement with his accustomed facility. At the time I saw him, he had abandoned business temporarily; and, under the advice of his physician, was endeavoring, by rest and relaxation, and abstinence from writing, to recover his former power.

5. At the suggestion of this gentleman, a friend, who occupied a position in a bank, called at my office in September, 1872, to consult me concerning a somewhat similar difficulty from which he was suffering. About a year before the time I saw him, he noticed that any attempt he made to accelerate his speed in writing, resulted in a contrary manner. In the same way, when his attention was in any manner directed to the act, he found that writing was impossible. There was no pain, no spasmodic or involuntary contraction, and no change in the character of his hand-writing, but the direction of his attention to the act he desired to perform, rendered its execution impossible. This continued several months, and he then noticed that when he wrote continuously for any length of time, he experienced an unusual sense of fatigue in his right hand, especially marked in the ball of the thumb; this was quickly succeeded by spasms of the muscles of the hand, and ultimately in those of the arm. He finally was compelled to abandon all attempts at writing, and was assigned to other duties by the officials of the bank. At the time I saw him, he was greatly improved. Since he had ceased writing he had experienced no inconvenience whatever, and the sentences he wrote at my request were not characterized by any of the peculiarities so apparent in the writing of those suffering from this disease. He said that as it was not necessary for him to do so, he did not intend to attempt to do any amount of writing again for at least a year.

6. A lawyer practising in Eastern Pennsylvania, began to suffer from writers' cramp in 1869. He ascribed the disease to prolonged over-exertion in writing. The spasms were preceded by severe pain shooting along the inner side of the right forefinger, tremor of the muscles of the right forearm, and great exhaustion, succeeding the act of writing. The spasmodic contractions developed suddenly, and from the time of their first occurrence, completely prevented writing in any form. Various plans of treatment were resorted to; a seton was inserted in the back of the neck, blisters were applied to the spine, and the arm was showered with cold water. No relief was obtained from these measures, however, and having been advised to use electricity, he came to this city to have it applied. Electrical

treatment, such as he received, likewise proved inefficacious, and after an unsuccessful trial of the movement cure, he came under my care in November, 1871. The characteristic symptoms of writers' cramp were all present; the act of writing was impossible, yet all other coördinated movements could be executed without difficulty. Treatment speedily gave relief in this case. After the second injection of atropia he could write his name as formerly, and had copied several sentences before any spasmodic symptoms were manifested. Fifteen injections were administered while he remained in New York, and the improvement was so marked that he was able to return home and resume business. A year subsequently, I again saw him and learned that he had had no return of the disease, and that as a precautionary measure he wrote as little as possible. One sixtieth of a grain of atropia was used at each injection.

7. A young gentleman whom I saw recently in Ohio, informed me that after prolonged over-exertion in writing he began to suffer from pain and cramp in the right hand and arm, coming on spasmodically whenever writing was attempted. The part first implicated was the thumb, and the pain was referred to the joint. The forefinger, the ball of the thumb, and the forearm were implicated in succession. At the present time, the attempt to write causes these spasmodic contractions, and after it is abandoned, the muscles of the right arm and side continue to twitch and an unpleasant sensation of numbness is experienced in the integument of the same parts.

The manner in which the disease is developed, and the order of succession of symptoms, differ with each and every case. The curious fact related by the bank-clerk, that the earliest symptom he experienced was an inability to voluntarily accelerate his writing, and the impossibility of writing at all when his attention was directed to the act, which was present for a length of time before any other sensation was experienced, has not been observed by any other patient into whose case I have inquired. The early development of fatigue, abnormal sensations in the ball of the thumb and stiffness and pain in the fingers, with or without alterations in the character of the hand-writing, are the symptoms which most generally precede the characteristic spasmodic contractions. When the cramp is once developed, it may manifest itself continuously—coming on whenever writing is attempted—or it may be present only when the act is first begun in the morning, and be overcome by persistent effort. The period during which it can be controlled by the will is very limited; its progress may be slow, but it is incessant, and sooner or later, the forearm and arm are affected, and, if writing be not abandoned, it may implicate the muscles of the right side of the body and the left upper extremity.

[To be concluded.]

Progress in Medicine.

REPORT ON ANATOMY.

By Thomas Dwight, Jr., M.D. Harv.

(Concluded from page 251.)

Bloodvessels.

Valves in the Renal Veins. By W. Rivington. *Jour. of Anat. and Physiol.* Nov., 1872.

Conformation de la Veine et des Artères Ombilicales. Paul Berget. *Archives de Physiologie.* Sept. and Oct., 1872.

The structure of the internal veins has received but little attention. The descriptions of the valves of the renal and spermatic veins are singularly imperfect, vague and conflicting. Quain says nothing of the former. Henle mentions them, adding that those of the right side are most developed. Luschka denies their existence, admitting only that one sometimes finds a fold at the lower part of the renal vein, where it empties into the cava, "which may be considered an indication of a valvular formation." Mr. Rivington has carefully examined a small number of subjects, and thinks "that a more extended investigation would be likely to establish the following points: 1. The existence of valves at the orifices of both right and left spermatic veins, with a few exceptions. 2. These valves are, as a general rule, double, being formed of two crescentic folds of lining membrane, which leave a slit-like aperture between them. 3. When no valves exist at the opening of the left spermatic into the left renal vein, valves are generally present in the renal vein within a quarter of an inch from the orifice of the spermatic. He found several cases of valves at or near the mouths of the renal veins and also of the semilunar fold described by Luschka.

Berget describes the folds in the umbilical vessels, which he thinks are improperly called valves by Hyrtl and others. They are folds formed by the whole thickness of the coats of the vessels. They may be on one side alone or they may extend all the way round the vessel. There are dilatations of the cavity between them. The history of the development of these folds is not known, but Dr. Berget has seen them in a cord of five months. He thinks that their office in the arteries is partly to direct the blood to the placenta and partly to act as reservoirs in case of any disturbance of the circulation, but he is unable to suggest the purpose of those in the veins.

Nervous System.

Tamamschef discusses the structure of nerve fibres (*Centralblatt*, Sept. 14th, 1872), coming to conclusion swhich are very different from those of Ranvier, mentioned in the first report, and show that much is still to be done in this line. He describes a delicate, elastic sheath investing the axis cylinder, which, after the use of reagents, he finds to consist of very small bodies (corpusculæ nerveæ) lying in a homogeneous ground substance. These corpuscles may be broken up into granules which will oscillate for hours in oil of turpentine. The corpuscles do not appear for about three-quarters of an hour after the nerve (taken from the living animal) has been under treatment, so

that one cannot but doubt if the author is justified in calling them "præformirt." After many experiments, Tamamschef has satisfied himself that the axis cylinder is albuminous.

In a valuable paper published in this JOURNAL, Jan. 23d, 1873, Prof. Burt Wilder recommends the brains of dogs for the study of the relations of brain and mind, because the characters of individuals and families, the transmission of peculiarities, the effects of crossing, &c., can be studied on the living animal, and its brain examined after death, which can occur whenever it is advisable.

Dr. Morris reports, in the *Brit. Med. Jour.*, Oct. 26, 1872, the occurrence of a brain weighing sixty-seven ounces, consequently the heaviest on record.

The lining of the ventricles and their communications with the subarachnoid space are described by Dr. J. Mierzejewsky in the *Centralblatt*, Sept. 28th, 1872 (No. 40). The epithelial cells rest on a layer of reticulated connective tissue mixed with a granular substance lining the cavities. The cells are of all grades, from columnar to squamous. Those on the anterior aspect of the central canal of the cord are more than twice as high as those on the posterior, and a similar plan is noticed in the ventricles. The cells lose the ciliæ and become flat as they pass from the ventricles into the subarachnoid space. The communications between the various cavities are traced by means of injections, and if the results should be confirmed, it will be seen that they are more numerous than is commonly supposed. The communication of the cavity of the fourth ventricle with the subarachnoid space, through the so-called *foramen of Magendie*, is generally admitted, but the author finds two additional ones, situated one on each side between the posterior parts of the peduncles of the cerebellum and the lateral choroid plexuses. There is, also, a passage from the descending horns of the lateral ventricles. The communication between the ventricles is said to be in the region anterior to the pineal gland, and we gather that the foramen of Monro is pervious only under great pressure. These latter statements are not very definite, and hard to reconcile with the usually received ideas, so that we are led to imagine that they may apply only to the brains of some of the lower animals, though there is no statement to that effect.

Mr. Cunningham publishes, in the *Jour. of Anat. and Phys.*, Nov., 1872, an account of a very careful dissection of some of the nerves of the head and neck. Of course, the results obtained from a single subject cannot be of great value, but some of them are of interest. There is some additional evidence that the buccal branch of the smaller division of the inferior maxillary nerve is sensory and not motor like the other branches of that portion. The buccinator is supplied by the facial nerve, which joins the small branches of the buccal. Mr. Cunningham found only two branches of the latter to which this did not occur, and he succeeded in tracing both these to the submucous coat of the mucous membrane of the cheek.

The distribution of the branches of the superior and middle cervical ganglia and of the great and posterior auricular nerves are also described in detail. An accessory phrenic was observed arising from the fifth cervical nerve and joining the phrenic in the upper part of the thorax. Spedl, in *Reichert and Du Bois-Reymond's Archiv*, 1872, heft 3, discusses the frequency of the occurrence of a root to the

phrenic from the fifth nerve. He was unable to account for the fact that the pain in disease of the liver or in pericarditis should be referred to the shoulder, and perhaps to the arm, if the phrenic does not have a root from some of the lower cervical nerves which form the brachial plexus. Spedl found a branch from the fifth nerve joining the phrenic in forty-seven cases out of fifty, but the position of the point of union was liable to great variations, which is probably the reason that it is so often considered a rare instead of a normal arrangement.

Connective Tissue and Viscera.

Inasmuch as connective tissue forms the framework of all the viscera, as most of them are more or less glandular in their nature, and as lymph is to be found well-nigh everywhere, it was thought advisable to consider more or less together the following structures which are in many respects very dissimilar.

Zur Histologie des Bindegewebes. Von Dr. Adickes. *Archiv des Heilkunde*, 1872, heft 4 and 5.

Boll on the same in the *Centralblatt*, No. 38 and 39, 1872.

Ueber die Entwicklung und den Bau des elastichen Gewebes im Netzkorpel. Von Dr. Oscar Hertwig. *Schultze's Archiv*, Bd. 9, ht. 1.

Ueber die Anfänge des Speichelgänge in den Alveolen des Speicheldrüsen. Von v. Ebner. *Schultze's Archiv*, Bd. 8, ht. 4.

Untersuchungen über den lymphatischen Apparat in der Milz. Von Dr. Kyber. *Schultze's Archiv*, Bd. 8, ht. 4.

Adickes and Boll give good résumés of the latest views on connective tissue. The results of Dr. Hertwig's studies on the development of fibres in elastic cartilage are briefly as follows: The fibres are formed from cells arranged in rows extending inward from the surface, which is where they appear first. These fibres, when so small as hardly to admit of measurement, are insoluble in caustic soda, which is one of the characteristics of elastic tissue, and consequently they should be considered as such from the beginning. As development proceeds, new fibres are formed from outgrowths of the preceding ones, and from cells, but never from the intercellular substance.

The conclusions reached by von Ebner, in a long paper on the origin of the ducts in the salivary glands (including the pancreas), are rather negative than positive. He claims that the results obtained by injections of Prussian blue are untrustworthy, and that a regular net-work of minute cylindrical ducts in the alveoles does not exist. He thinks it probable that the ducts arise from irregular spaces between the cells and an intra-alveolar net-work, which he believes to be of an epithelial nature.

Kyber describes a perivascular lymphatic system in the interior of the spleen, while another set of lymphatics run on the trabeculæ.

Investigators should remember that though the mammalian spleen is essentially the same throughout the class, yet there are two types according to the arrangement of some of its constituent parts.

One of these types is represented by the spleen of the horse, the ox, the hog, and, according to Billroth, of the sheep. The other, by that of man, the rabbit, the dog, the cat and the mouse.

Muscles of the Kidney.—Ebert, in the *Centralblatt*, 1872, p. 225, describes a net-work of involuntary muscular fibres under the capsule of the human kidney. These fibres are not continuous with those of

the bloodvessels. Though, in general, superficial, they have some prolongations into the cortical substance.

Schiff writes, in *Stricker's Medicinische Jahrbuch* (1872, heft 3), on the round ligament of the uterus, and Luschka describes the course and relations of the ureter in the female, in the *Archiv für Gynækologie* (band 4, heft 3). As abstracts of these papers have already been copied from one journal to another, we give merely the original references.

Supra-renal Capsules.

Albert von Brunn writes, in *Schultze's Archiv* (Bd. 8, heft 4), on the minute anatomy and development of these bodies. He has examined them in many animals, and unfortunately does not always mention in which one certain appearances occur. In spite of the differences between the cells in the three layers of the cortical substance, he thinks that they are all of the nature of connective tissue. The author appears not to have found in the superficial portion (zona glomerulosa) the vascular convolutions of which Arnold speaks, but he dwells upon the great dilatation of the vessels in the cortical, and particularly in the medullary substance. He holds that the vessels (excepting the largest veins and arteries) consist merely of the internal coat, covered by a little loose connective tissue, with the cells of the parenchyma lying in its meshes. Thus there is a great opportunity for changes to go on in the blood. There is nothing new concerning the nerve and ganglion-cells, except that decidedly more of the latter are found in the capsule than in the interior of the organ.

Von Brunn has not completed his embryological researches, but has found that, in the fœtal chick, these organs are in the closest relation with the great abdominal vessels. The two portions, however, have not quite the same origin; the cortical being more nearly connected with the aorta, and the medullary with the cardinal vein. The author thinks that the supra-renal bodies are to be considered venous blood-glands, just as the carotid and coccygeal glands are arterial ones. As to the function, he suggests that the cells extract some element from the blood, change it in some manner and replace it. He claims to overthrow the idea that they are wholly or in part "nervous organs," but it is not clear that he has done so, for admitting all his views of the nature of the cells, &c., there still remains this remarkable collection of nerve-cells to account for.

Placenta.

Studien über den Bau der menschlichen Placenta und über ihr Erkranken. Dr. C. Hennig. Leipzig. 1872.

Observations on the Structure of the Human Placenta. By Prof. Turner. *Journ. of Anat. and Physiol.*, Nov., 1872.

Zur Rentniss der menschlichen Placenta. Von Dr. F. N. Winkler. *Archiv für Gynækologie*, Bd. 14, heft 2.

The difficulties of the study of the anatomy of this organ are so great that it may not be unadvisable to give a very brief statement concerning some parts of its formation before discussing the questions at issue. Let it be supposed that an impregnated human ovum has fallen into a fold of the mucous membrane of the uterus. It is soon enclosed by two layers of new formation, resulting from the hypertrophy of the lining of the uterus. One of these is formed by the meeting of the free edges of the folds over the ovum, and is called the *decidua*

reflexa, and grows under the edge of the other, which is continuous with the bottom of the sac, and which is called the *decidua vera*. Both of these layers grow and expand with the ovum. Another new growth appears between the *vera* and the muscular coat of the uterus, constituting the *decidua serotina* (Hennig). Passing over its earliest changes, let the egg be supposed to have reached the point at which a part of its surface is covered with a vascular fringe—the *chorion*—the vessels of which communicate with the body of the embryo; and, further, that the fringe-like projections are arranged in tufts, and project into and among the structures of the decidua. All these structures constitute the placenta, which, theoretically at least, can be divided into a fœtal and an uterine part.

Without following the history of development very closely, Winkler gives a good diagrammatic description of what is to be seen in a section of the placenta. He states that the maternal portion is that which directly determines the form, and also that the fœtal part is nothing more than a convolution of more or less subdivided tufts set into the former.

Beginning at the junction of the uterus and placenta and going inwards, we find, first, the basement layer (Basalplatte), which may be subdivided into two, the outer of small. the inner of large cells. Next comes the cavernous portion, consisting of a fibrous framework, continuous with the basement layer, forming partial separations between large cavities. Third in order, is the closing layer (Schlussplatte), comparatively thick, bounding the cavernous portion. The fœtal portion consists of the chorion (Deckplatte), from which the tufts force their way into the maternal portion. Winkler divides the tufts into three classes:—1st, very small ones, which do not pass the closing layer; 2d, larger ones, which, however, only reach the superficial spaces of the cavernous part; and, finally, those which extend all through it. There is a free communication between all the vessels of the tufts, and the central vessel is surrounded by a network of capillaries. In the placenta, lymph vessels open into arteries and veins of various sizes, as well as into the capillaries.

The generally received opinion is that Winkler's cavernous portion is full of blood from the uterine veins and arteries with which its cavities are held to connect. Dr. Braxton Hicks (*Jour. of Anat. and Physiol.*, May, 1872) is the last who has disputed this. He does so on the ground that he has often separated the two parts of the placenta and found no blood between the fœtal tufts.*

Prof. Turner's paper is to be in three parts, of which only the first has appeared. This is on "the relations of the maternal bloodvessels to the placenta," and contains the account of the experiments in which he has proved beyond question the existence of the sinuses. He has injected them from an artery as well as from a vein of the uterus, in cases where the placentæ were still attached, and he has also watched fluid, which had been injected into the marginal sinus, running among the villi. It was not till this part of his paper was finished, that Prof. Turner's attention was called to the researches of Prof. Dalton, who, several years ago, inflated the intervillar spaces by blowing air into a vein in the wall of the uterus.

* Vide last Report on Anatomy in this JOURNAL, Sept. 12th, 1872.

There is much difference of opinion as to the presence of any covering to the villi, or, in other words, as to the number of layers separating the blood of the child from that of the mother. Turner states that he has seen a cribriform membrane over the tufts so thick as almost to conceal them, but that in other places he has seen the villi project "free and naked into the canal of the sinus." Winkler found a rudimentary epithelial covering to the villi, and suggests that it is through its imperfections that the system of the embryo may be infected by that of the mother. Hennig writes that there are from two to five layers between the bloods. Dalton's* account is very clear, though apparently theoretical. He says: "The blood of the fœtus is always separated from the blood of the mother by a membrane which has resulted from the successive union and fusion of four different membranes, viz., first, the membrane of the fœtal villus; secondly, that of the uterine follicle; thirdly, the wall of the fœtal bloodvessel; and, fourthly, the wall of the uterine sinus." If we consider Turner's epithelial layer over the villi to have come from the inner coats of the maternal veins, we have fact and theory strictly in accord.

Hennig's work is very comprehensive, but, unfortunately, obscure in many points. It is not easy to catch his idea concerning the capacity and importance of the sinuses. Here is his summing up of the relations of the fœtal villi: "It is my opinion *that the tufts of the chorion reach the reflexa in the second and third months, that they grow through it and then force their way into the vera* (as Spiegelberg has shown), *and that in the last months they run through the deepest parts of the serotina, breaking through not only the openings of the glands, but also the slit in the interstitial tissue* of the maternal tufts, *and, finally, the vessels*, as in the marginal sinus of the maternal portion." It will be observed that, according to Hennig, the placenta consists of two layers of decidua besides the *serotina*. He holds that in their development these layers form parts of two hollow spheres, the *reflexa* above the ovum and the *vera* below it, and that, as they grow, the former introduces itself under the latter. The same author finds that the glands of the uterus are, to a great extent, destroyed during the first months of pregnancy, so that in the latter months they are not to be clearly demonstrated (at least outside of the placenta), and can be recognized only by their orifices, the perforations of the sieve-like decidua.†

COSSACK VACCINATORS.—The *Brit. Med. Jour.*, Dec. 7, 1872, mentions the outbreak of a mutiny at Chodshent. Its cause was the somewhat summary proceedings of the authorities in endeavoring to protect the people against the ravages of smallpox, one of the scourges of the region. Accompanied by Cossacks, the government surgeons entered village after village, and, pouncing upon the inhabitants wherever they found them, inserted the virus. At Chodshent the terror which preceded and followed the medical cavalcade led to open resistance. Fancying that the punctures were intended to mark those sought out for transportation to Russia, the people rose against the Cossacks, killed two of them, and also one of their own elders pressed into assisting at the hateful ceremony. A Russian force having entered the city, two of the rioters were executed, nine sent to the Siberian mines, ten others banished, and several thousand fined.

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* Human Physiology, last edition, p. 646.

† Writers of papers on Anatomy will contribute much assistance in the preparation of these reports if they will forward copies of their papers, addressed to this JOURNAL.—EDS.

Bibliographical Notices.

The Dangers of Chloroform and the Safety and Efficiency of Ether as an Agent in securing the avoidance of Pain in surgical operations. By J. MORGAN, M.D., F.R.C.S. London: Baillière, Tindall & Cox. 1872. Pp. 45

THIS pamphlet presents in elaborate terms the important facts, familiar to a community in which ether is extensively used, bearing upon the efficiency and safety of that agent as an anæsthetic.

It is but a few years since a prediction was printed in this JOURNAL that the day was not far distant when sulphuric ether would be the only and universal anæsthetic. Prejudice against it has ceased in this country, and now, after long delay, Great Britain, self-convicted, wheels into line, and from an antagonist becomes a partisan. We look upon the revival which is at present exercising the frightened adherents of chloroform beyond the sea, as due, not to the missionary efforts of any individual, but as the result of a natural law; in short, it is but another and striking instance of the survival of the strongest.

We had occasion, some time since, in noticing another essay by Mr. Morgan, to use some rather severe language. Of the present, we have only to express a favorable opinion; and, as authority in matters pertaining to ether fully entitled to write pastoral letters, we commend it to our English converts in the belief that its perusal will do them good. We can most confidently assure them of the correctness of Mr. Morgan's statement, "that chloroform, with its signal dangers, has claims far inferior to ether as a pain destroyer; and that such a resolution as was adopted by the Massachusetts Hospital—'that the exclusive use of ether should be an absolute law of the Institution'—has been most advantageous for its patients."

Obstetric Aphorisms: for the use of Students commencing Midwifery Practice. By JOSEPH G. SWAYNE, M.D. Second American from the fifth revised English edition, with additions. By E. R. Hutchins, M.D. Philadelphia: 1873. Pp. 189.

THIS little manual has passed through four editions in England, and the second American, reprinted from the fifth revised English edition, is now given to the profession with a few brief and rather unimportant additions by Dr. E. R. Hutchins, of Cedar Rapids, Iowa. The book, as the author states in his preface, is not intended to be used, in any way, as a substitute for a systematic treatise on midwifery, but rather as a pocket guide which shall give the student a few brief and practical directions respecting the management of ordinary cases of labor, and which shall point out, in extraordinary cases, when and how he may act upon his own responsibility and when he ought to send for assistance. The object of the book is admirably carried out, and the author has managed to give in very concise and clear language the diagnosis and treatment of most of the complications which are liable to occur in the management of obstetric cases. Without commending in any way the substitution of pocket-guide books for personal knowledge, we must admit that Dr. Swayne, in his *Obstetric Aphorisms*, gives us at least a most excellent manual for the medical student who is preparing for his examination in obstetrics.

Pharmacopœia of the United States. Fifth Decennial Edition. Philadelphia: J. B. Lippincott & Co. Pages 383.

To any one first led to consider the subject of the use of drugs in the light of certain annual addresses and other popular productions of a like tone, the appearance of a new edition of the Pharmacopœia must appear like a gross anachronism, a ghost from the dark ages of medicine intruding himself into the clear light of modern science. If, however, he contemplated the thousand advertisements of panaceas which fill the columns of the most respectable newspapers, he might wonder that the book is not larger, or account for its reasonable dimensions by adopting the popular theory that the medical profession, like Molière's candidate, have sworn to use no drugs but those presented by the "faculty" and obstinately refuse to recognize the infallible means of cure which are constantly being re-discovered by gentlemen whose cathartic and diuretic services are rewarded by "palatial" residences, six-in-hand equipages in which to outshine the President of the United States, or even the privilege of hiring a respectable village to transmit the borborygmi of their peristaltic fame resounding to posterity. A little investigation, however, will suffice to show that, with few exceptions, the pharmaceutical needs of the community may be as well supplied from officinal sources as by private enterprise. Popular medicines generally belong to one of three classes:—1. Preparations of inert or useless substances (usually with some unfamiliar name) which have long been given up by the profession, or have a value merely as replacing some other drug not so easily obtained, such as galangal, syrup of symplocarpus, coltsfoot, &c. 2. Preparations of useful drugs, apparently cheap because of inferior quality (elixirs of calisaya, bitters, buchus, &c.). 3. Secret combinations of well-known drugs (soothing syrups, cathartic pills and the like).

The new edition of the Pharmacopœia has been made to include nearly all the improvements of the last ten years, both in the way of materia medica and preparations. Few remedies of real value fail to obtain recognition, but we wish that the committee had taken under their protection the useful but much bequacked preparations of pepsin and pancreatine. The elegant, efficient and, at the same time, cheap preparation of pepsin, by Mr. Scheffer, of Louisville, might very properly have found recognition here. Among the important preparations added are digitalin, extract of calabar bean, bromide of ammonium and citrate of lithia. Conium is represented by the "succus" and extract of the seeds, in addition to three of the older preparations, one having been dismissed. The American hemp, which Dr. Wood has shown to possess the virtues of cannabis Indica, has been made officinal.

A whole class of glycerites has been added, as well as *chartæ*, *cantharidis* and *sinapis*. A large number of suppositories also become the objects of officinal directions. A noticeable feature in regard to the fluid extracts, beside the great increase of their number, is the preparation of many of them with glycerine. Of the preparations dismissed, few if any are to be regretted, and more might have been spared. The presence of one, at least, tincture of aconite leaves, was liable to produce serious mistakes.

As to the nomenclature, we have one fault to find, which is that so few of the common names of plants are given among the synonyms. Digitalis may be properly enough anglicised by the same word, but fox-

glove should certainly appear as a common name. Podophyllum is often called mandrake; and chimaphila, in this neighborhood at least, more frequently wintergreen than pipsissewa. Gaultheria, which has five or six English names, is translated gaultheria, probably on account of this very superfluity, but no synonym is given.

We will close with one more wish, which is that the committee of revision had been able to devise some method for bringing into use, or at least into notice, the decimal system of weights and measures. Although ourselves unable to suggest a plan, it seems so exceedingly desirable that this system, already so largely in use for chemical purposes, and even in pharmacy, should be introduced into the ordinary affairs of life, that a little temporary sacrifice of commerce might well be made to attain this end.

Notwithstanding these criticisms, it seems to us that the committee have well succeeded in carrying out their object, which is to "gather up and hoard for use what has been determined to be positive improvement, without pandering to fashion, or to doubtful novelties in pharmaceutical science."

The Science and Practice of Medicine. By William Aitken, M.D., Professor of Pathology in the Army Medical School. Third American, from the Sixth London Edition, with additions by Meredith Clymer, M.D. Penn. Philadelphia: Lindsay & Blakiston. 1872. Two vols., pp. 1056 and 962.

Dr. Aitken may well call this the "representative work" of the Medical Science and Practice of the present day. It is a reliable text-book for the younger men in medicine, and may be looked on as a compendium, most thorough and complete, for both the older and more recent members of the profession.

The work has been thoroughly revised and much has been rewritten; new articles on important subjects have been added, and the whole work has been conformed to the advanced standard of the day.

The present edition now embraces a consideration of the topics in the order of classification of the College of Physicians of London. This plan has been adopted by the author as an inducement to secure a uniform system of naming diseases in the medical schools.

For sale at 135 Washington Street, by A. Williams & Co.

Unconscious Action of the Brain, and Epidemic Delusions. By Dr. W. B. Carpenter, F.R.S., &c. &c.

These are two lectures by the well-known English physiologist (Dr. W. B. Carpenter) whose physiological researches and writings are not less familiar to the American than to the European medical public. They form Part No. 6 of a series of Essays called "Half-hour Recreations in Popular Science," published by Estes & Lauriat, Boston. In the first of these lectures, Dr. Carpenter explains and illustrates the unconscious or automatic action of the brain and spinal cord. In the second lecture, he shows how this automatic action serves to explain many of the extraordinary delusions that have prevailed more or less extensively from the earliest ages to the present time. He refers to the Flagellants, the Dancing Mania, the Convulsionnaires of St. Medard of the middle ages, and to the Spiritualism of modern times, as instances of epidemic delusions that may be explained by our

present knowledge of the nervous system. He points out with great clearness the important physiological fact that the brain is to a large extent a machine like the rest of the body, and one capable of doing a great deal of work by itself, unconsciously and automatically; and that when the brain and the body work together in this automatic way independently of the will, phenomena are sometimes produced that are equally curious and extraordinary. The key to the explanation of the phenomena of spiritualism is undoubtedly to be found in the physiological fact clearly illustrated by Dr. Carpenter in these lectures that "the powers and activities of the mind are to a very great degree independent of the will," and "that the mind will go on of itself without any more than just the starting of the will, in the same manner as a horse will go on in the direction that it has been accustomed to go with merely the smallest impulse given by the voice or the hand or the heel of the rider." In accordance with this law, muscular force may be exerted by one who is unconscious of the effort his muscles make, and mental impressions received from sources that the individual takes no cognizance of. Those who care to know how physiological science deals with many of the curious phenomena of spiritualism and kindred delusions will do well to read these lectures of Dr. Carpenter.

E. H. C.

Seventeenth Annual Report of the Trustees of the State Lunatic Asylum at Northampton. Boston. 1873.

The bulk of this public document is made up of the report of Dr. Pliny Earle, the well-known Superintendent of this Asylum, giving, in a clear and succinct form, some very interesting statistical information respecting the past history of the institution, covering the entire fifteen years of its existence. The number of persons admitted during the year ending September 30, 1872, was 195. The number treated in the asylum during the year was 619, of which 299 were males and 320 females. The smallest number under treatment upon any one day was 412; the largest number, 455. As to the condition of the patients upon leaving the hospital, 40 were discharged as cured, 60 improved, 49 unimproved; the number of deaths was 37. To those familiar with the results obtained at other institutions, it may at first sight seem that the ratio of recoveries exhibited by these figures is small, and we should be guilty of an act of injustice to Dr. Earle if we did not append some explanation. It appears to be the custom to transfer to this hospital from the other State institutions a certain class of chronic cases, or such as give but slight indication of immediate restoration. A very considerable number of these patients, therefore, are not presumed to be amenable to medical treatment, and the ratio of recoveries is, of course, correspondingly less than would be returned, provided all the patients were received directly from their homes, and in the earlier stages of the disorder. Again, a less favorable color is given to these returns by the practice of removing, at an early period after admission, those beneficiaries who, being immigrants, chanced to land in other States, the responsibility for whose support consequently rests with those States. Of this class many are taken away, leaving behind the record of improved, who, had they been permitted to remain longer, would, in all probability, have been completely restored.

The report gives evidence of the efficient management of the asylum, and of the general adoption of the more modern principles in the treatment of this class of unfortunates, care being taken to divert their minds by means of assemblies, dances and exhibitions.

As an adjunct to the administration of drugs in the various stages of insanity, Dr. Earle attaches great importance to *open-air industrial occupations*, not simply as a hygienic measure, nor for the sole purpose of diverting the thoughts of the insane, but rather as a potent means of effecting cure. Manual labor, and especially farm-work, is, therefore, recommended here as a therapeutic agent, and the able-bodied are stimulated to enter the field by appeals to their palate, or by the promise of various privileges or perquisites. In this way, a large part of the farm work, as well as the improvements about the estate, have been actually carried out by the patients. A list is inserted of the products of the farm thus raised, the value of which amounts to a little less than $10,000.

The argument in favor of additional hospital accommodations for the insane in this State is clear and convincing, and cannot fail to have due weight with our legislative authorities. Massachusetts, it is shown, has accommodations for only about *one and one-third to a thousand* of the population, whereas the Canton of Zürich, in Switzerland, has accommodations for very nearly *four to a thousand*, that is to say, a hospital capacity three times as great as that of Massachusetts. To medical men, we would especially commend that portion of this report which relates to the Scotch plan of boarding out insane patients in private families, which has been most extensively carried out in the Belgian Colony of Gheel, and also the cottage system of hospital buildings, like that adopted at the Whittingham Asylum, in Lancashire, and which has been hitherto advocated by Dr. Bemis, of Worcester. Without entering into a general discussion of the merits of the Scotch sysem, Dr. Earle adduces very cogent reasons, showing that it is not applicable to a state of society like that existing in Massachusetts. An insuperable obstacle to the introduction of this system is the high price obtained here for labor, which renders easy the earning of a livelihood, and which makes it difficult if not impossible to find responsible families who would be willing, at a reasonable rate, to provide suitable homes for insane persons.

The adoption of the cottage plan of hospital, composed of several detached edifices, is objected to by Dr. Earle on two grounds, and both these objections strike us as being reasonable and practical. They are briefly as follows: First, *the excess of cost*; second, *the difficulty of surveillance*. The former circumstance affects only the pockets of the taxpayers. The increased duties of the superior officers resulting from the increased labor of watching these separate buildings tends necessarily to interfere with the proper supervision of the asylum, and thus affect directly the welfare of the patients. A. H. N.

A System of Oral Surgery. Being a Consideration of the Diseases and Surgery of the Mouth, Jaws, and Associate Parts. By JAMES E. GARRETSON, M.D., D.D.S. Oral Surgeon to the Medical Department of the University of Pennsylvania, &c. Philadelphia: J. B. Lippincott & Co. 1873. Pp. 1091.

DR. GARRETSON'S book seeks to cover the vantage ground between the two professions of medicine and dentistry—a hiatus which has been

continuously in the mind of the author, as he asserts, in the composition of the work. To bridge over this gap "by supplying the lacking span is the highest ambition, as it has been the almost life-long labor, of the author."

Two years ago, the author gave to the public a work very similar to the present, and, indeed, this "system," following the elements of the subject, from the first departures from normal life, is but a farther unfolding of the same idea. It is likely to be of assistance to the dentist who finds that a knowledge of general medicine is necessary to the comprehension of oral surgery; and to the general practitioner whose duties occasionally lead him into the province of the dentist.

Aids to the Diagnosis of Diseases of the Kidneys. By W. R. Basham, F.R.C.P., formerly Censor and Croonian Lecturer and Examiner in Medicine for the License of the College. Philadelphia: Lindsay & Blakiston. 1872. Pp. 48.

This little volume contains sixty drawings from specimens of albuminous urine, and the explanatory text, with a statement of the termination, whether in death or recovery. It is the author's object to give a standard of comparison for students and practitioners who have not frequent opportunities for microscopic research, and to such the book may be very useful.

BOOKS RECEIVED.

Notes on Asthma; its Nature, Forms and Treatment. By John C. Thorowgood, M.D. Lond. Second Edition. Philadelphia: Lindsay & Blakiston. 1873. (For sale by A. Williams & Co.)

Club-foot; its Causes, Pathology and Treatment. Being the Essay to which the Jacksonian Prize for 1864, given by the Royal College of Surgeons, was awarded. By William Adams, F.R.C.S. Second Edition. Philadelphia: Lindsay & Blakiston. (For sale by A. Williams & Co.

PAMPHLETS RECEIVED.

Annual Report of the Surgeon-General of the Commonwealth of Massachusetts for the year ending Dec. 31, 1872.

Abstracts and Intelligence.

The Physiology of Tears.—Dr. Daniel Tuke, who has been investigating this subject, thinks we must confess with Brodie that we cannot answer the simple question why or how a certain state of mind augments the secretion of the lachrymal gland. Gratiolet inferred, partly from his own sensations, that tears result from reflex irradiations which traverse the fifth pair of nerves; that is to say, the emotion of joy or sorrow acts first upon the heart or the other viscera through motor channels, and is then reflected upon the sensory nerve supplying the gland. But this does not seem anatomically or physiologically justifiable. It is much more likely that the influence is transmitted directly either to the capillaries of the gland by actively dilat-

ing motor nerves, or through nerves to the lachrymal cells themselves, directly exciting their functional activity. We might apply to the lachrymal gland Sinitzin's conclusions in regard to the trophic influence of the cervical sympathetic and the fifth pair on the eyeball; but some difficulties present themselves, however, into which we cannot now enter. The *quality* of the secretion also seems to be altered by powerful emotions; the saline ingredients being increased, causing "a strong brine." Lastly, the secretion may be entirely checked. The intensity of the feeling or the suddenness of the sorrow is the most frequently witnessed cause of this.

Daily observation shows that the first result of distressing intelligence is a negative one—inability to cry. See, too, what the want of a handkerchief may do. "I went," says Hunter, "to see Mrs. Siddons' acting. I had a full conviction that I should be very much affected; but unfortunately I had no handkerchief, and the distress was in, for the want of that requisite when one is crying, and a fear that I should cry, stopped up every tear, and I was ashamed that I did not, nor could not cry."

Hysterical Ischuria.—M. Charcot, in his opening lecture at La Salpêtrière (*Ann. et Bul. de la Soc. de Gand*, July, 1872), gives an account of an extraordinary case of suppression of urine. A young woman, subject to various manifestations of hysteria, began in the month of April, 1871, to experience a remarkable diminution of the urinary secretion. Remembering similar instances (that of Nysten, for example), in which the fraud resulted in detection, M. Charcot for a long time regarded this as a case of deception. By keeping her, however, under prolonged observation, every precaution having been taken to prevent any fraud, the reality of her symptoms was placed beyond a doubt.

The patient was confined to her bed, having lost the use of her limbs, from contraction of the joints, which could not be extended even when she was under the influence of chloroform. To prevent all imposition, she was now kept under the constant observation of one or more women, although she was herself quite unaware of their presence. It was found that the retention of urine was complete. None was voided without the aid of the catheter, nor was the linen of the bed in the least soiled. During a period of several months the quantity of water drawn off by means of the catheter did not exceed 30 grammes each day, and in several instances for some successive days the suppression was complete.

It transpired at the same time that the woman experienced daily attacks of vomiting, and in the fluid thrown up a considerable quantity of urea was found. At the end of several months, the ischuria gave way to a slight polyuria, at which time all vomiting ceased. This was followed the present year by another period of diminution of the urinary secretion, this time without suppression, the vomited matter being less abundant than before.

The following is the average amount of urine voided and matter vomited for a period of twelve days.

Matter Vomited, 362 grammes, including 2 grammes of urea.

Urine, 206 grammes, including 3 grammes of urea.

The amount of urea excreted by the skin and the intestines must

have been insignificant, as the patient suffered from obstinate constipation, and did not perspire freely. It can be affirmed then that for a period of several months this woman excreted a few grammes only of urea. In spite of this anomalous condition of the kidneys, her general health remained good, none of those symptoms appearing which are generally observed in patients suffering from retention.

The blood was found, upon examination, to contain no more than the usual amount of urea, so that it must be admitted that the production of this constituent was much below the normal amount.

M. Charcot proceeds to show at length that in the present instance the retention of urine was not dependent on a spasm of the ureter, for where the canal of the ureter is obstructed, either by means of a ligature or by the presence of a calculus, the urine, while it is secreted less abundantly, becomes very weak, which was not the case with this woman, so that the cause of the ischuria must have have had seat in the kidneys. This case will serve to demonstrate that hysterical ischuria has an actual existence, a fact which has been very generally doubted, so many spurious cases of this affection have from time to time made their appearance. It is not unreasonable, therefore, to regard the hysterical vomiting, which takes place when ischuria is present, as a supplementary process to the functions of the kidneys.

Nitrite of Amyl in Angina Pectoris.—*The Practitioner*, Dec. 1872, contains an article on the use of this remedy by W. H. Madden, M.D. The writer's father died of angina pectoris, and he himself had cardiac disease. July 8, he had a severe attack of angina, and from this date the paroxysms were of frequent occurrence and of increased violence. Various remedies were tried, but with little or no benefit.

At length the inhalation of the nitrite of amyl was suggested and tried. The doctor thus describes its effect: "The spasm was, as it were, strangled at its birth. It certainly did not last *two* minutes, instead of the old weary *twenty*. And so it continued. The frequency of the paroxysms was not diminished for some time; but they were mere bagatelles as compared with their predecessors. The attacks became less and less frequent, and finally ceased." At the time of writing (Oct. 11), he had not had an attack for five weeks.

The phenomena presented by the action of the remedy are thus described: "The first effect was often bronchial irritation, causing cough; then quickened circulation; then a sense of great fulness in the temples and burning of the ears; then a violent commotion in the chest, tumultuous action of the heart and quick respiration. The angina then died out first in the chest, next in the left upper arm, and last of all in the wrist, where it was usually extremely severe. In speaking of my first experiment with the amyl, I said the spasm was, as it were, *strangled;* this word accurately expresses the sensation. I felt as if a new power was suddenly called into play, which seized hold of and, by a violent effort, crushed out the force previously in action. It was not by any means in itself a pleasant process; but I delighted in it, for I knew the end would be relief. When the pain had ceased, there was generally for some time a strong, involuntary tendency to suspension of breathing, each prolonged pause being followed by a very deep inspiration. There was not at any time the slightest confusion of thought, or disturbance of vision, but occasionally slight and transient headache."

Correspondence.

Infleshed Toe-nail.

Messrs. Editors,—This affection, so difficult to name, has been yet more difficult to cure, as the annals of surgery abundantly testify; so that even to this day, as Dr. Cotting justly remarks, "it still remains one of the minor *opprobria* of our art." In M. Velpeau's Operative Surgery, published in three large volumes of some 3000 pages, with a quarto Atlas of Plates—large enough, one would think, to exhaust the entire field—he discourses on this disease and its remedies (in vol. i.) from page 363 to 375 inclusive. And, after discussing the three methods usually practised—"destruction of the nail," "destruction of fungosities," and "re-adjustment of the nail,"—he gives decided preference, in most cases, to evulsion. Now it is interesting to observe how near one sometimes comes to making an important discovery and yet misses it! Ambrose Paré, in the 15th century, describes an operation precisely the same as that practised by Dr. Cotting, but failed simply because he did not cut deep enough. His operation (Velpeau, tom. i., p. 369) consisted in "cutting off completely, and with one stroke, the flesh lapping over (*recourbée sur*) upon the nail." And the record is, that he "often succeeded by adopting this mode." He failed, of course, when he simply removed the fungosities, and "succeeded" when his knife was carried through the sound flesh. The same remarks of success and failure apply to the operation of M. Brachet, who followed Paré, with a slight modification of his operation. It is thus described:—"Holding his bistoury like a writing pen, he introduces its point between the nail and the raised border of the soft parts, which he cuts through from above below, and separates first at its back part; then, seizing with the forceps the flap which has been thus cut, he terminates its section forwards by a second stroke of the bistoury."

As Paré's operation is the same as that practised by Dr. Cotting, so is M. Brachet's that which I am about to describe, with this important difference in both cases, however, that we cut deeper, and always cure the disease, whilst they, for want of a bold sweep of the bistoury, often failed. It was as long ago as 1837, when I was a member of Prof. Delamater's private class, that one of the students was suffering excruciating tortures from this disease, and had been for years. At times unable to walk, and often deprived of sleep, he had consulted different surgeons, who recommended as many different remedies, some amounting merely to palliatives, and others falling short even of that. The affected toe was enormously enlarged, with both edges of the nail imbedded in a fungous mass, while the outer edge was very much inverted. Dr. Delamater removed a generous slice from each side of the toe, freely liberating the edges of the nail. The wounds healed by granulation, and in a few weeks the cure was completed; nor has there ever been a return of the difficulty. So gratifying was the result, and so deeply was I impressed with the perfect success of the operation, that when I purchased my first pocket-case of surgical instruments, soon after, I was careful to add a double-edged bistoury, specially adapted to this operation. My mode of operating—differing in no essential particular from that of Prof. Delamater—has always been to drop this double-edged bistoury down between the fungus and the nail, bringing it out on the under side of the toe with a backward sweep, following the edge of the nail as a guide. Then, with a dog-tooth forceps, grasping the flap thus made, a second stroke forwards with the knife, still closely applied to the edge of the nail, completes the operation.

This operation, one of the earliest I performed after graduating, has always been successful in my hands; so that, in a practice now exceeding more than a third of a century, I have no case of failure to record. It has been done both with and without the aid of anæsthetics. My earlier operations, of course, were done before the discovery of ether. The readers of your Jour-

NAL will thus see that the operation, as above described, while it is even more radical than that which Dr. Cotting calls his own, and differently performed, is yet essentially the same. Now the writer lays no claim to originality in this matter, and is perfectly willing that Drs. Cotting and Gunn should settle claims of priority between themselves. The operation is simply that of Ambrose Paré, modified by M. Brachet, and taught to be done more thoroughly by Prof. Delamater, who practised it forty years ago; and I moreover contend that if done in the radical manner above indicated, so that the edge of the nail is uncovered, it can never fail of absolute success. It makes no difference whether the nail is inverted or not; it can never again become "imbedded," "incarnated," "infleshed," or *incarné*.

I had just finished this, and was about affixing my signature, when *Braithwaite* for January, 1873, was laid on my desk. In glancing over its pages, I see that B. Blower, Esq., of Liverpool, desires "to add a mite to the evidence repeatedly given in the journals, that the removal of the nail (to his knowledge not always successful) is unnecessary." But instead of the radical course pursued by Dr. Cotting, and recommended here, he inserts bits of compressed sponge beneath the nail, and destroys the granulations with nitric acid. This practice may succeed in mild cases; but in grave ones must fail, as all similar plans, for centuries past, have failed. I will only add that in all the operations I have done for this disease, I have never interfered with the nail. It is quite unnecessary, as the nail takes care of itself when once the flesh in which it is imbedded is removed. The only ambition I have in this whole matter is that my "mite of evidence," may be made subservient with Dr. Cotting's in establishing a "new procedure" in this particular operation of minor surgery.

Yours &c.,

37 *Maverick Square, Boston, Feb.* 13, 1873. DANL. V. FOLTS.

LEPROSY IS NOT CONTAGIOUS.

MESSRS. EDITORS,—In behalf of the rich and poor lepers all over the world, I would enter my protest against the conclusions in Dr. Kneeland's article in the JOURNAL of March 6th, as to the contagiousness of leprosy and the necessity of separating these unfortunates from their fellow-men. From some personal knowledge of the disease itself, but more especially from a somewhat extended study of what has been said and written concerning it, in various parts of the world, I am firmly of the opinion that it is not contagious. This has always been the conclusion arrived at by those who have gone over the same ground; for instance, the committee of the Royal College of Physicians, who replied to the Colonial Office by a report submitted to the College July 20, 1863, as follows:—

"The committee having had referred to them the letter of Mr. Fortescue of July 9th to Dr. Pitman, the Registrar, conveying the wish of the Duke of Newcastle to be furnished with a statement from the committee, exhibiting, as forcibly as possible, the full weight of the evidence which has been obtained, down to this time, as to the contagiousness of leprosy, and the conclusions which the committee have drawn therefrom, beg leave to report:

"1st. The number of replies hitherto received through the Colonial and Foreign Offices amounts to sixty-two. These returns have come from many of the West India Colonies, and also from New Brunswick, from the Ionian Islands, and from several places in the Turkish Empire; from Sierra Leone, Tunis, and Cairo; and from Tabreez, Ceylon, Hong Kong, China, and Kanawaha. Besides these official returns, four replies have been received from medical gentlemen now residing in this country, but who have seen the disease in different countries abroad.

"2d. In forty-five of the replies, a decided opinion is expressed that the disease is not contagious. Only a few of the reporters, however, give any facts in support of this opinion.

"3d. In nine of the replies, an opinion is expressed that the disease is not contagious, but no satisfactory evidence is adduced in favor of this view.

"4th. In the remaining twelves replies, either no opinion is expressed on the subject of contagion, or the statements made are quite indefinite.

"5th. The committee, having carefully considered the replies already received, are of the opinion that the weight and value of the evidence they furnish is very greatly in favor of the non-contagiousness of leprosy.

"6th. The committee, therefore, can only repeat the statement made in their former report to the College, that the replies already received contain no evidence which, in their opinion, justifies any measures for the compulsory segregation of lepers."

This committee consisted of Thomas Watson, President, George Budd, G. Owen Rees, Arthur Farre, William W. Gull, Gavin Milroy, E. Headlam Greenhow, Henry A. Pitman, Registrar.

Mr. Fortescue's letter, above referred to, says:—"His Grace desires me to inform you that he contemplates sending out a circular to the Governors of all Her Majesty's Colonies, expressing an opinion that any laws affecting the personal liberty of lepers ought to be repealed; and that in the meantime, if they shall not be repealed, any action of the executive authority in enforcement of them, which is merely authorized and not enjoined by the law, ought to cease."

The committee again say, further on in this voluminous report of some 300 pages, "With respect to the employment of measures for the compulsory segregation of leprous persons, the opinion expressed by the committee in their communications to the Colonial Office on May 21 and July 20, 1863, has been much strengthened by the evidence subsequently received."

Finally, the 10th article of their conclusions reads thus:—

"The all but unanimous conviction of the most experienced observers in different parts of the world is quite opposed to the belief that leprosy is contagious or communicable by proximity or contact with the diseased. The evidence derived from the experience of the attendants in leper asylums is especially conclusive on this point.

"The few instances that have been reported in a contrary sense either rest on imperfect observation, or they are recorded with so little attention to the necessary details as not to affect the above conclusion.

"That leprosy is rarely, if ever, transmissible by sexual intercourse, when one of the parties has no tendency whatever to the disease, is the opinion of the great majority of the respondents who have had the largest opportunities of observation."

This is the invariable report from *students* of the disease all over the world. Such men as Danielssen and Boeck in Norway state that:—"Among the hundreds of lepers whom we have seen daily, not a single instance has occurred of the disease spreading by contagion. We know many married persons, one of whom is leprous, co-habiting for years without the other becoming affected. At St. George's Hospital, many of the attendants on the inmates have lived there for more than thirty years, and are quite free from any trace of the disease. As the result of our observations, we have only to deny the contagiousness of leprosy."

I might adduce, in addition, the reports of such men as Virchow, Hebra and Kaposi, but I trust I have quoted enough to prevent any rich or poor leper among us, and they are among us, from being hastily regarded with any more feeling of horror, or shunned for any other reason, than the personal disfigurement the disease produces. The time is not, perhaps, very far distant in this country when boards of health may be called upon for an authoritive opinion as to the propriety of the segregation of leprous persons from the rest of the community, as was formerly done not very far from this State. Dr. Kneeland's communication might help lead to such a segregation. In behalf, therefore, of the rights of the unfortunate, both rich and poor lepers, I have answered it by the above quotations.

15 *Chestnut St., Boston.* B. JOY JEFFRIES, M.D.

Medical Miscellany.

EIGHT hundred cellar dwellings in Leeds, England, are reported by the Sanitary Committee to be totally unfit for human habitation.

SMALLPOX.—The number of deaths by this disease during last week has been but five, and there is quite a falling off in the number of new cases reported, showing a sure and steady abatement of the malady that has caused so much fear and suffering during the past winter.

APPOINTMENTS.—Drs. W. P. Bolles and C. B. Belt have been appointed Assistant Surgeons at the City Hospital for the ensuing year.

Dr. C. W. Stevens, of Charlestown, has been elected City Physician of that city, in place of Dr. E. J. Forster, who declined re-election.

MR. W. B. ANDREWS, for many years the Janitor at the Medical School in this city, was found dead on Tuesday morning last, by his son, in one of the upper rooms of the college building, having committed suicide by discharging the contents of his own pistol through his mouth into his brain. No cause or motive for the act has as yet been discovered. The school has lost the service of a valuable and efficient officer.

WE notice on the list of new members of the Massachusetts Medical Society the names of George K. Sabine, Edward H. Bradford, William H. Workman and Frederick C. Shattuck, at present House Pupils at the Massachusetts General Hospital.

DR. W. F. JENKS, of Philadelphia, has used nitrite of amyl in *puerperal convulsions* with success. He allowed the patient to inhale the medicine from a handkerchief in the usual manner, some five drops only having been used.

THE *Prix Civiale* of one thousand francs, given every two years for the best essay on any subject connected with the urinary organs, has been awarded to Mr. Thomas B. Curtis, of this city, who, for many years, has been pursuing his medical studies in Paris. This prize is open to the Internes of hospitals, about one hundred and thirty in number. It has been given but once since Civiale's death, to Reverdin, whose name has become well known in connection with epidemic grafting. The subject of Mr. Curtis's essay is—The Treatment of Stricture by Dilatation. This is but one of many honors won by Mr. Curtis since his connection with the Ecole de Médecine. We understand he intends, after taking his degree this spring, to return to this city, where we hope he will decide to remain.

THE REMOVAL OF FOREIGN BODIES FROM THE EAR. Dr. J. Gruber maintains that foreign bodies are most easily removed from the external ear by means of the syringe, this being simpler than any other method of extraction, and less liable to inflict injury upon the tympanum and other parts of this organ. He cites several cases to illustrate how many vegetable substances, which find their way particularly into the ears of children, can be made to shrink up by the application of certain astringents, such as diluted lime water, or a solution of the sulphate of zinc, and can then be readily removed.

THE monthly report of the City Registrar of Providence contains the following extract:—

During the month of January, 28 cases of smallpox, of every description, were reported in this city. Of this number, 5 died. The disease still continues, though not increasing. Thus far, this winter, the cases have not been so numerous, nor so fatal as they were during the last winter. The whole number of cases this winter to the 12th of February has been 52. Of these, many have been very slight. About one-half of the whole number have come from Boston.

WORTH REPEATING.—"No one can injure a professional brother without still more deeply injuring himself, advice we are sorry to say," says the London *Lancet*, "not universally followed."

DEATH OF BARON CHARLES DUPIN.—This eminent member of the Académie des Sciences, the last of three celebrated brothers, died Jan. 18th, in the 89th year of his age. M. Dupin was laborious to the last, and only a few days before his death read an elaborate paper on the results of the census just taken in France. His death bears some connection with that of Napoleon III., whose decease has made numbers anxious as the state of their bladders. Baron Dupin unfortunately determined to pass a catheter for himself, and employed a flexible one, probably without examining its solidity. While passing under the pubes it broke, and a fragment engaged in the deep portion of the urethra. Attempts were made to extract it, but it slipped into the bladder. A slight rigor followed, and attempts at extraction were postponed, but the patient died shortly after, before these could be carried out.—*Medical Times and Gazette.*

DEATH FROM NITROUS OXIDE.—A death from inhalation of nitrous oxide gas occurred at Exeter (England), January 23d last. The gas was given to produce insensibility during the extraction of a tooth. The patient was a woman about forty years of age. After a few inhalations, the pulse was noticed to be becoming weak, and the administration was stopped for a time. As the patient had not become insensible, the inhalation was resumed, and the tooth withdrawn. The patient had become livid, and in a few minutes died. Her health had been excellent previously, and there was no reason known why she would not be a good subject for the gas. This is said to be the first death from nitrous oxide in England. A case has also been reported in this country.

ERRATA.—On page 245, line 11, for "dead" read *dry*. Page 248, in 3d line of paragraph on tricœlian heart, instead of "last" read *first*. Page 251, 2d line of second paragraph, for "place" read *face*.

PAMPHLETS RECEIVED.—Transactions of the Territorial Medical Society at its Second Annual Meeting, held in Denver, Col., September, 1872. Denver. 1873. Pp. 34.

MARRIED,—In Chicago, 26th ult., E. W. Sawyer, M.D., of Boston, Mass., to Miss Mollie E. Manney, of Chicago.

MORTALITY IN MASSACHUSETTS.—*Deaths in fifteen Cities and Towns for the week ending March* 1, 1873.

Boston, 180—Charlestown, 12—Worcester, 10—Lowell, 24—Milford, 5—Chelsea, 7—Cambridge, 20—Salem, 7—Lawrence, 7—Lynn, 16—Fitchburg, 5—Taunton, 6—Newburyport, 1—Somerville, 9—Fall River, 17. Total, 326.

Prevalent Diseases.—Consumption, 51—pneumonia, 36—scarlet fever, 16—smallpox, 13—croup and diphtheria, 11—typhoid fever, 9.

The deaths from smallpox were as follows:—In Boston eleven, Cambridge one, and Charlestown one. Of the deaths from scarlet fever, fifteen were in Boston.

GEORGE DERBY, M.D.,
Secretary of the State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, March 8th, 146. Males, 71; females, 75. Accident, 1—abscess, 1—apoplexy, 1—asthma, 1—aneurism, 1—inflammation of the bowels, 1—bronchitis, 4—congestion of the brain, 1—disease of the brain, 11—cancer, 2—consumption, 26—cerebro-spinal meningitis, 5—convulsions, 4—debility, 7—diarrhœa, 1—dropsy, 4—dropsy of the brain, 7—diphtheria, 1—erysipelas, 4—scarlet fever, 11 disease of the heart, 3—hæmorrhage, 1—intemperance, 2—disease of the kidneys, 1—disease of the liver, 2—congestion of the lungs, 1—inflammation of the lungs, 11—marasmus, 2—old age, 4—paralysis, 3—premature birth, 2—peritonitis, 1—puerperal disease, 3—rheumatism, 1—syphilis, 1—smallpox, 5—disease of the spine, 1—teething, 1—ulceration of throat, 1—unknown, 6.

Under 5 years of age, 58—between 5 and 20 years, 19—between 20 and 40 years, 24—between 40 and 60 years, 22—over 60 years, 23. Born in the United States, 103—Ireland, 33—other places, 10.